

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of the claims in this application.

Listing of Claims

1. (Currently amended) An amino acid sequence being able to facilitate penetration of a substance of interest inside cells and/or cell nuclei and having one of the following formula: Leu Arg Arg Glu Arg Gln Ser Arg Leu Arg Arg Glu Arg Gln Ser Arg (SEQ ID NO:1 [[NO.1]]) or [[-]] Gly Ala Tyr Asp Leu Arg Arg Arg Glu Arg Gln Ser Arg Leu Arg Arg Arg Glu Arg Gln Ser Arg (SEQ ID NO:2 [[NO.2]]).

Claims 2-18. (Cancelled)

19. (Previously presented) The combination of an amino acid sequence according to claim 1 with a substance of interest.

20. (Previously presented) A method of preparing a composition for the transfer of a substance of interest into cells, comprising combining the amino acid sequence of claim 1 with a substance of interest to produce said composition.

21. (Withdrawn) A vector for intracytoplasmic and/or intracytosolic and/or intranuclear *in vivo* transfer of a substance of interest, constituted by or comprising at least one amino acid sequence according to claim 1.

22. (Withdrawn) The vector of claim 21 coupled to at least one substance of interest that can be incorporated naturally or non-naturally into cells and/or the nuclei of said cells.

23. (Withdrawn) The vector of claim 22, wherein said substance of interest is coupled at N or C terminal end of the amino acid sequence.

24. (Withdrawn) A vector according to any of claims 21 to 23, wherein the substance of interest is chosen from the group comprising nucleic acid, protein, drug, antigen, antibody, polymer, marker such as fluorochrome.

25. (Withdrawn) A vector according to any of claims 21 to 23, wherein the substance(s) of interest is (are) coupled to said vector via at least one anchoring molecule having a strong natural affinity for said substance of interest.

26. (Withdrawn) A vector according to any of claims 21 to 23, wherein the substance(s) of interest is (are) coupled to said vector by genetic engineering or by chemical, biochemical, enzymatic coupling.

27. (Withdrawn) An eukaryotic cell containing an amino acid sequence according to claim 1 or a vector according to any of claims 21 to 23.

28. (Previously presented) A biological, pharmaceutical, cosmetic, agro-food, diagnostic or tracking composition, comprising as active ingredient an amino sequence according to claim 1, or a vector according to any of claims 21 to 23.

29. (Withdrawn) A biological, pharmaceutical, cosmetic, agro-food, diagnostic or tracking composition, comprising as active ingredient a eukaryotic cell according to claim 27.